The Influenza and How to Cure it.

See page 214.

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EDITED BY DR. ANDREW WILSON, F.R.S.E. &C.

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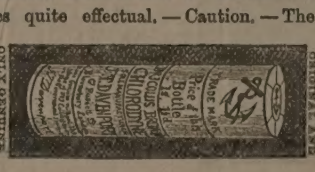

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◆ HEALTH ◆

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

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Notes by the Way

BY THE EDITOR.

"Health is the foundation of all our physical happiness."—*Herder.*

A CONTEMPORARY directs attention to the alleged poisonous effects of tobacco smoke on meat. Cases of poisoning due to meat, it says, which seemed thoroughly wholesome have sometimes occurred and have remained unexplained. In the *Revue d'Hygiene* of this month M. Bourrier, inspector of meat for the town of Paris, makes a valuable suggestion. He describes his experiments with meat impregnated with tobacco smoke. Some thin slices of beef were exposed for a considerable time to the fumes of tobacco, and afterwards offered to a dog which had been deprived of food for twelve hours. The dog, after smelling the meat, refused to eat it. Some of the meat was then cut into small pieces and concealed within bread. This the dog ate with avidity, but in twenty minutes commenced to display the most distressing symptoms, and soon died in great agony.

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ALL sorts of meat, both raw and cooked, some grilled, roasted, and boiled, were exposed to tobacco smoke and then given to animals, and in all cases produced symptoms of acute poisoning. Even the process of boiling could not extract from the meat the tobacco poison. Grease and similar substances have facilities of absorption in proportion with their fineness and fluidity. Thus the fats most readily influenced by tobacco smoke are, in their respective order, the fat of horseflesh, of pork, of veal, of beef, and finally of mutton. Hashed meat is, of course, more readily affected than large pieces; thus, a few puffs of smoke directly projected on to sausage-meat will give it a characteristic and unpleasant taste.

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THE juices of meat are equally dangerous. The juice squeezed out of some veal perfectly saturated with tobacco smoke was injected into a rabbit, and death resulted in a few moments. Fresh-killed meat is more readily impregnated, and stands in order of susceptibility as follows—pork, veal, rabbit, poultry, beef, mutton, horse. The effect also varies considerably according to the quality of the tobacco, and the end of a cigar or a pipe has the most injurious effect on any meat that may be exposed close to the smoker. A few jets of smoke from Belgium tobacco on a dish of raspberries will suffice to entirely destroy the delicate flavour of the fruit and to render it uneatable. All these experiments would seem to denote that great care should be taken not to allow smoking where foods, especially moist foods, such as meats, fats, and certain fruits, are exposed.

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SOME interesting points of comparison between the health of London and that of New York are summarized by an American contemporary. The deaths in London last year numbered 78,848, or 18·5 per 1,000; in New York, 40,175, or 26·33; and in Paris, 22·6 per 1,000. The birth returns for New York are incomplete; but the birth-rate in London was 30·7 per 1,000; in Paris, 27·0. The male births in Paris were 30,723; the female births, 29,913. In London the numbers were, males 66,629; females, 64,451; but in the total population of London there is a majority of 250 females. Premature births in New York numbered 1,155; in London, 2,099. To be equal, the figures referring to New York should only be a third.

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NEW YORK compares favourably with London in the matter of suicides. There were 247 in New York, and 400 in London. Between 800 and 900 persons take their own lives in Paris every year. In New York 1,138 were killed by accidents; in London, 2,516. There were only 1,892 deaths from bronchitis in New York, while in London there were 10,085. But while some hundreds die every year in London as the result of idleness and obesity, 61 deaths were recorded last year from starvation. A decreased death-rate is invariably accompanied by a lower birth-rate. The deaths in London last year were the lowest on record; the births the lowest since 1841. In the western districts, where the wealthy reside, and where the degree of comfort is high, the deaths fell to 16·4, and the births to 25·5; but in the impoverished and overcrowded east where the poor never get a breath of fresh air, and are huddled together in unhealthy alleys, the deaths rose to 27·2, and the births to 36·5. The people least able to support children are the most prolific; and the higher the degree of social comfort and well-being, the less the increase of population.

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DR. G. PARSONS, writing in a contemporary on the use of antipyrin in the treatment of sea-sickness, says that although sea-sickness is usually a trivial affection, yet when long continued, or when occurring in debilitated subjects, it may occasion dangerous exhaustion. It may also be followed by an attack of *delirium tremens* when occurring in persons of intemperate habits. The effectual treatment of sea-sickness is a matter therefore of some importance. The drugs which have been chiefly recommended for this purpose include the bromides, bismuth, chloral, cocaine, nitrite of amyl, &c. "After an extended trial," says Dr. Parsons, "I have found them all more or less ineffectual. Of late I have employed antipyrin in the prophylaxis and treatment of sea-sickness with considerable success. Of a series of twenty cases so treated, twelve entirely escaped sickness, while with the remainder the attack was markedly reduced in intensity, and shortened in duration as compared with former experiences. My plan is to administer five grains of antipyrin, freshly dissolved in a wineglass full of water

at the time of embarking, and to repeat the dose in four hours. As a rule three doses at most are required. In these severe cases where nothing can be retained in the stomach, the antyprin may be administered hypodermically (*i.e.*, by injection into the skin) and in such cases the application of a small blister or mustard leaf over the pit of the stomach is usually of marked benefit."

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DR. PRENTISS, in the *Therapeutic Gazette*, relates a remarkable occurrence following the use of jaborandi. The patient was a woman, aged seventy-two, who had had snow-white hair for twenty years. For the symptoms of commencing kidney disease twenty to thirty minims of extract of jaborandi was prescribed several times daily. The drug was taken from October, 1886, to February, 1888. During the autumn of 1887 the eyebrows were becoming darker, and the hair of the head became also darker in patches. This continued until the patches of hair were quite dark, contrasting with the natural patches of snow-white hair. The hair did not universally change before her death. In 1881 Dr. Prentiss had published another case of kidney disease, treated with pilocarpine. The hair of the patient, a lady, aged twenty-five, changed from light blonde to black under the influence of the drug. The pilocarpine was administered hypodermically (one-sixth of a grain) twenty-two times in the course of two months; the dose was then increased. In one month after commencing the treatment the hair changed from a light blonde to a chestnut brown; four months later it was "almost a pure black." It is satisfactory to find that eight years afterwards the hair is again a dark brown.

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DR. PRENTISS ascribes the phenomenon to the jaborandi and its active principle pilocarpine. Cases where, as the result of the influence of the nervous system, in pain or fright, the hair has changed colour are pathological curiosities. So little is known, says the medical journal from which I quote, however, of the physiological influence of the nervous system over the growth and nutrition of hair, that it is at present quite impossible to understand how a drug administered internally can alter the colour of the hair. It would be interesting to learn from other practitioners who have used jaborandi or pilocarpine for an extended period, whether any change in the colour of hair has been noticed.

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GAS-JETS may be made important auxiliaries to ventilation. Inserted in the bottom of air-shafts, they establish active currents which withdraw the vitiated air, and may be made especially useful on occasions when apartments are unusually crowded. It has been proved by experiment that one cubic foot of illuminating gas can be utilized so as to cause the discharge of 1,000 cubic feet of air; and as a common gas burner will consume nearly three feet of gas an hour, it would extract from an apartment 3,000 cubic feet of contaminated air during that period. By suitable contrivances also the gas-lights, which usually are such active causes of deterioration, may not only become self-ventilating, and carry off their own impurities, but also aid materially in keeping pure the air of inhabited apartments. Inventors have made successful contrivances for ventilating the burners of chandeliers, but they have hitherto not received the attention they merit.

Original Essays

"Life is not to live, but to be well."—*Martial.*

THE INFLUENZA AND HOW TO CURE IT.

BY DR. ANDREW WILSON.

SOME considerable amount of alarm, it appears, has been created by the news that in Russia, Germany, and in France—that is to say, in Paris at least—an epidemic of influenza has been smiting its thousands, and laying upon a bed of sickness a very large proportion of those whom it has attacked. There is nothing markedly dangerous in influenza itself, and it humbly appears to me that a vast deal of absurdity is both being talked and written about the threatened visit of the epidemic to our own coasts. A very severe attack of cold in the head, extending to and affecting the chest and digestive organs—such is the definition of "influenza." The name is of Italian origin, and signifies something of transient and passing nature. The term in this light describes fairly well the disease itself.

The symptoms are as follows: First of all there is chill and a feeling of *malaise;* then the temperature rises, and fever supervenes; the cough becomes troublesome; the eyes water; the head seems "full" and heavy; the throat and tonsils are inflamed; there are pains in the limbs, with an indisposition to exertion of any kind; and the expectoration is scanty, but not of thick character as is seen in bronchitis. Now, there is nothing special, so far as one can see, in an attack of influenza which distinguishes it from a very severe cold. I can find no symptom in the former which is not to be seen in the latter. Indeed, as everybody knows, a severe attack of cold which, beginning in the head, ends in the chest, and is accompanied by a rise in temperature, is often named an "influenza." Primarily, then, there is nothing to be alarmed about, even if the epidemic should strike our shores. It may be inconvenient and very disagreeable to find colds and catarrhs spreading universally; but a few hundred extra cases of colds or a thousand or two more catarrhs in each neighbourhood or district will not affect us materially. The aged and feeble will doubtless have their chances of long life lessened, just as severe weather similarly affects their rate of mortality; but even in this exceptional respect the influenza will not add markedly to the death-rate at large.

The term influenza was first used by Dr. Pringle in 1752. In the 16th century the disease was known, and from that time to the present it has certainly appeared some ninety times in Europe; although of late years its visits have been circumscribed as to locality, and have diminished in their frequency. As to its *cause*, one need have no hesitation in saying that "the omnipotent germ" is the *fons et origo* of the mischief. A common catarrh is catching, probably because the secretions of the nose and mouth containing its germs are diffused in a dried state, inhaled by the healthy, and thus give origin to the ailment. That influenza is propagated in a similar fashion seems to go without saying. Is their anything more extraordinary, let me ask, that influenza should now and then become epidemic than that scarlet fever, measles, or small-pox should occasionally show a tendency to spread widely? Cases of these fevers are always with us; they occur here and there sporadically—that is, as the product of isolated germ-planting; but sometimes when the circumstances—air, weather, temperature, &c.—favour them, the single

cases of a fever light up and extend into hundreds; and we then say the fever has become "epidemic." So is it with influenza; and so is it with every other contagious or infectious disease. Some condition or other has favoured the spread, or, what is more to the point, the rapid multiplication and diffusion of influenza-germs; and as result, in place of a few detached cases, we find our thousands. *Voilà tout.*

Quoting from an account of the influenza disease I find a writer telling us that, "After a long interval of inaction or apparent death, it springs up again. Its chronology is very remarkable. Though probably occurring in Europe from very early times, it first emerged as a definitely known historical epidemic in the year 1510. Since then more than 100 general European epidemics have been recorded, besides nearly as many more limited to certain localities. Many of them have in their origin and progress exhibited the type to which that of the present year seems to conform. We need not go further back than the great epidemic of 1782, first traceable in Russia, though there believed to have been derived from Asia. In St. Petersburg, on January 2nd, coincidently with a remarkable rise of temperature from 35 deg. F. below freezing to 5 deg. above, 40,000 persons are said to have been simultaneously taken ill. Thence the disease spread over the Continent, where one-half of the inhabitants were supposed to have been affected, and reached England in May. It was a remarkable feature in this epidemic that two fleets which left Portsmouth about the same time were attacked by influenza at sea about the same day, though they had no communication with each other or with the shore. There were many epidemics in the first half of this century; and the most important of them showed a similar course and geographical distribution. In 1830 started a formidable epidemic, the origin of which is referred to China, but which at all events by the end of the year had invaded Russia, and broke out in St. Petersburg in January, 1831. Germany and France were overrun in the spring, and by June it had reached England. Again, two years later, in January, 1833, there was an outbreak in Russia, which spread to Germany and France successively, and on April 3rd the first cases of influenza were seen in our metropolis; 'all London,' in Watson's words, 'being smitten with it on that and the following day.' On this same fateful day Watson records that a ship approaching the Devonshire coast was suddenly smitten with influenza, and within half an hour forty men were ill. In 1836 another epidemic appeared in Russia; and in January, 1837, Berlin and London were almost simultaneously attacked. Ten years later, in 1847, the last great epidemic raged in our own country, and was very severe in November, having been observed in St. Petersburg in March, and having prevailed very generally all over Europe."

Regarding our chances of escape in Britain from the Continental epidemic, it is not easy of course to assert anything definitely. Like cholera, influenza spreads from east to west, and so it may be thought we are certain to be attacked. But the influenza of Paris in 1866-67 did not touch us; while that of Berlin in 1874-75 also did not reach our coasts. There were also epidemics of influenza in 1850-51, in 1855, in 1857-58, which affected the Continent widely, but left these islands free. I might enlarge this list by showing that influenza appeared in Europe in 1863-64, in Switzerland and France; in 1866-67, as above noted, in France, Germany, and Belgium; and in 1868 in Constantinople; and yet Britain escaped scot free. There is, therefore, evidently no need for us to cry out so loudly as several of my contemporaries have been doing about the certainty of our attack. On the contrary, it is just as likely that we may escape, as that we shall suffer*; and indeed, having regard to past experience, it may be thought that the barrier of sea or other circumstances which prevented our attack in the years named may as feasibly operate to guard us from our enemy on the present occasion.

One circumstance, curious in itself, as well as possibly important from other points of view, is found in the coincidence that in certain attacks horses suffered from an epidemic disease prior to the infliction on human beings of the influenza itself. The writer from whom I have already quoted says that, "Whether the disease affects the lower animals is not absolutely certain, but the human epidemic has often been preceded or accompanied by an epidemic among horses of a very similar disease. It is pretty well known that such a disease is now very prevalent among horses in London. Nearly three weeks ago (*i.e.* early in November, 1889) one of the railway companies in London had 120 horses on the sick list, and the epidemic is still by no means extinguished. To a certain extent this must be taken as prognostic of human influenza." But he might have added that in 1693 horses suffered severely prior to human attack; while in 1767, 1775, 1853-54, 1857-58 in Europe, and in 1872-73 in America, the equine race heralded by then suffering the human disease. The connection between the epidemic in horses and influenza in man is, of course, a matter concerning which it is impossible to dogmatize. We may be safe in saying, however, that the most obvious explanation is that what affects the horse also affects the man; and the priority in attack would simply amount to the declaration that the constitution of the lower animal was less capable of resisting attack than is that of man. As far as I can learn, no one has plainly suggested the idea that the disease was (or is capable of being) *transferred* from the horse to humanity.

The matter of *treatment* is naturally one regarding which my readers, on the principle of "forewarned being forearmed," will naturally expect some information. Briefly summed up, the treatment for influenza is that adapted for a severe cold. The indications are, (1) to guard against chill; (2) to promote sweating; (3) to encourage expectoration; (4) to support the strength; (5) to check diarrhœa if it occurs; and (6) to recruit the system after the attack by tonics and change of air.

A contemporary gives the following sensible summary of treatment:—"Whenever influenza attacks any one he should take to bed without delay, and begin to take diaphoretics at once. For an adult a powder composed of Dover's powder, ten grains; lobelia, three grains; and nitre four grains, is a good thing to start with; so also is a one-twentieth grain pilocarpine tabloid. Either of these starts diaphoresis (or sweating), which must be maintained by hourly doses, consisting of one minim of tincture of aconite in a teaspoonful of Mindererus spirit. Meanwhile the strength should be maintained by nourishing food, preferably in liquid form, such as soups and beef-tea. Diarrhœa is a common symptom, and should be treated with small doses of opium and astringents. When the febrile symptoms have abated the administration of nourishing food should be continued during the

* As I write, I hear of the occurrence of cases of influenza in London, Lincolnshire, and elsewhere; but I also observe that doubt seems to be cast upon the character of these cases, which are otherwise regarded as those of ordinary catarrh.

period of convalescence, which lasts ten days or a fortnight, the patient meantime taking a tonic of the Easton's syrup class. Amongst the secondary symptoms of influenza are frontal headache (for which antipyrin is likely to be the popular remedy on this occasion), cough, and sore throat, which may be treated with the usual remedies. The complaint is sometimes spoken of as one of inferior gravity, like a common cold, but the symptoms are distinctly different; it is contagious, intensely weakening, occasionally fatal, and for these reasons it is not a thing to treat lightly."

Dr. Horace Dobell, whose authority in matters of treatment cannot be questioned, in a letter addressed to the *British Medical Journal*, says that, "Whenever a sharp, short, sudden, and widespread epidemic seizes upon a population, it is of the utmost importance to have ready a 'cut and dried' routine plan of treatment carefully designed for general use, which can be put in force at once, leaving it for the doctor in each case to modify it afterwards if necessary. For instance, how often his first summons and his first visit will be hasty, not giving him time to think out an original plan of treatment! I venture, therefore, to ask you to publish the following plain directions, which I have designed and written out for several medical friends and patients, based upon my experience in 1847, modified by subsequent events, and by the special characteristics of the present epidemic.

"*Directions.*—True influenza sets in with severe frontal headache, distressing pains in the back and limbs, sense of prostration, and quickly rising fever. These symptoms are probably due to the inhalation by the nostrils of a highly irritating infectious virus, which sets up inflammation in the lining of the post-nasal and frontal cells, which may extend lower down the respiratory tract if not quashed at once.

"1. It is best to go to bed at once, and take hot gruel, hot tea, and beef-tea for diet during the more acute state, resuming ordinary solid meals as soon as practicable.

"2. The bowels should be kept well open (but not much purged) by any aperient known to act most kindly with the patient.

"3. The use of the following inhalation should be begun immediately:—℞ Creasoti, one drachm; olei caryoph., one drachm; olei eucalypt. glob., one ounce; tr. camph. co., to make up two ounces. Shake the bottle, and put one teaspoonful into a four-pound jam jar, nearly fill it with boiling water, wait two minutes to let the hottest steam pass off, and then hold the face well over the jar, and throw a large light handkerchief over the head and the jar; shut the eyes, and let the forehead and face be thoroughly exposed to the steam, which should be drawn up the nostrils and blown out at the mouth. Continue this as long as steam lasts (about fifteen minutes), and repeat every two hours.

"4. In the interim, gargle occasionally with hot water, and let all secretions from the nose and throat be ejected.

"5. Soon after the first inhalation, begin the following restorative febrifuge:—℞ sp. camphoræ, one drachm; sp. ætheris nitr., one ounce; tr. quin. ammon. ad. two ounces. One teaspoonful stirred in a claret glass of water every three hours.

"6. If the temperature rises above 101 degrees F., take gr. v of antifebrin in two tablespoonfuls of beef-tea, and repeat every hour till the temperature falls to 100 degrees, continuing the inhalations and drops as before.

"7. If pain or oppression at the chest sets in, apply hot poultices.

"No danger need be apprehended if the above directions are followed in good time. The doses ordered are for persons over twelve years of age, and must, of course, be reduced for those who are younger, under medical orders."

Among other useful hints, I find the following:—Dr. Bernard O'Connor says that, "It may be of advantage to some practitioners to know that there is a substance perfectly harmless in use, which has the effect of *immediately* lessening, if not altogether putting an end to, the most pronounced *nasal* symptoms of acute febrile catarrh. One application is generally sufficient for an ordinary "cold in the head." Powdered "periodate crystals" (Weaver's) forcibly blown into the nostrils, or simply dropped in, if the patient is lying flat on his back, and then sniffed up, will cut short an attack, if administered *at the very beginning*. The combination of bismuth, morphia, and gum powder, in the form of "snuff," once commonly used, is valueless when compared with "periodate," which is, as far as is at present known, the most powerful antiseptic ever used. It can be swallowed in almost any quantity without the least risk."

Dr. R. H. Milson in speaking of the researches of Dr. Dewar of Kirkcaldy upon "Sulphurous Medication" in ordinary colds says, "Let me give my personal testimony of its value in influenza. Some years ago, when I had an important engagement for 6.30 p.m., I came home at 5 o'clock to dress. My eyes were then streaming, and I sneezed so violently and so persistently that it was almost impossible to do anything *but* sneeze. By spraying sulphurous acid into my nose and about the room I was able to keep my appointment with scarcely any inconvenience. Should influenza come upon us, would it not be materially prevented from spreading through a family by the use of the sulphurous spray, which is so destructive to infectious germs? Slightly diluted with water, and with the addition of a little eau de Cologne, it is very agreeable in any sick-room." Stern's Pumiline will also be found very useful. In the form of the Pumiline Essence added to hot water and used in an ordinary inhaler, this substance certainly relieves the oppressed breathing and promotes expectoration.

The fortunate persons will be those who can remain indoors for treatment. They will recover more speedily than their neighbours who may have to attend to business, and whose risks of cold and chill are therefore materially increased. Finally, the tonic treatment by quinine and iron, or the Syrup of the Hypophosphites, and change of air, may be recommended as items calculated to brace up the system against fresh attack.

BRAHEE SUGAR POWDERS.—For many years these powders (prepared by Pinkerton, Gibson & Co., of Edinburgh, and sold by all druggists) have enjoyed a high reputation for the cure of toothache, earache, and all other neuralgic troubles, while in rheumatism they have also proved of high value as curative of pain. Long ago the merits of the Brahee Powders were noted in the *Lancet* in a communication which detailed the experience of a medical man in their administration. Full directions accompany each packet of powders, and as this remedy is simple and effective in character, we have pleasure in commending it to the attention of our readers during the season when colds and neuralgic troubles are certain to prove on the increase. In influenza and catarrh, it may be added, Brahee Powders act beneficially by checking the disagreeable "running from the nose," and by relieving the distressing sense of fullness in the head which marks these ailments.

Personal Health

"Be timely wise;
With health all taste of pleasure flies."—*Gay.*

WINTER COUGH.

In many instances people only suffer from this complaint during the cold season; but after awhile the symptoms often become permanent to a greater or less degree, being subject to an increase of violence when exposed to a damp and cold atmosphere. Uneasiness and soreness of the throat is experienced, constantly increased by coughing; there is a sense of oppression across the chest, with shortness of breath on exertion. Paroxysmal coughing is the chief symptom, sometimes causing extreme exhaustion. Much irritation of the throat is experienced in the evening and early in the morning; there is usually an abundant expectoration of thick, slimy, purulent matter, which is very difficult to expel. Sometimes the sputum congregates in the throat, causing extreme difficulty in breathing, and when this is loosened the mass occasionally gives off a most offensive odour.

Occasionally winter cough is unattended by profuse expectoration, but the oppression of the chest is experienced, and there is wheezing; there are occasional distressing paroxysms of cough, either quite dry or only followed by expectoration of a very small quantity of mucus, similar in appearance to a piece of boiled starch. This most uncomfortable disease should be carefully attended to, as it may be occasionally accompanied with much debility and wasting as it progresses in virulence, causing night sweats and feverishness, ultimately developing into consumption. When winter cough is carefully attended to in its first stages it may be completely cured; should it progress and become confirmed, it can only rarely be successfully treated. People suffering from winter cough frequently live to a good old age.

In the first stages of the disease (wheezing and oppression of the respiratory apparatus), the person should be very careful about exposure to the damp atmosphere, warm clothing should be worn, and flannel clothing next the skin. If possible, when the atmosphere is damp or foggy, the sufferer should stay indoors, or if obliged to go out, he should carry a Pinol Eucalyptia Dry Inhaler, charged with Eucalyptia, in his mouth, inspiring the air through it. This little instrument is in appearance similar to a cigar, being of a brown colour. If the patient be a lady, she may cover it with her hand, the increased heat favouring the volatilisation of the medicament. The Eucalyptia is a useful stimulating expectorant, and is an admirable antiseptic filter, all disease germs being destroyed, while the particles of irritating matter are filtered out.

It should be observed that the nose is a very good filter itself; therefore any air passing through the nose is devoid of irritating matters when the throat and lungs are reached. It is very necessary to look after the state of the general system; should the purulent matter be swallowed it may cause uncomfortable dyspeptic symptoms. To remove these a couple of Laxative Tabloids may be taken at bedtime, and a Rhubarb and Magnesia Tabloid two or three times a day as a tonic. In debilitated conditions a teaspoonful of Fellow's Syrup of Hypophosphites may be taken two or three times a day, or, if in children, a teaspoonful or two of the Kepler Malt Extract and Chemical Food. A food-stimulating diet is absolutely necessary; an excellent assistant in nutrition to the ordinary food is the Kepler Malt Extract, or Kepler Solution of Cod Liver Oil in Malt Extract. Cod liver oil is probably the most prescribed agent for combating this distressing disease; unfortunately this oil may be vomited, or cause much uneasiness in the stomach.

To obviate this, *pharmacy* came to the assistance of *medicine*, and discovered that cod liver oil would dissolve in, and be partially digested by, Kepler Malt Extract, and now it is more generally prescribed in this form. Chloride of ammonium vapour exerts a solvent action upon thick and elastic mucus, assisting in the easy expectoration and elimination of the cause of irritation from the breathing apparatus. Dr. Vereker is the introducer of a great boon to bronchitic subjects—Dr. Vereker's Chloride of Ammonium Inhaler. A few drops of pure Terebene or Eucalyptia upon a piece of sugar often gives relief when the irritation is very acute. These last named may be well rubbed into the chest with the hand when oppression or weight is experienced in that region.

A WORD ABOUT SHAVING.

Probably civilized man will always shave, for much the same reason that he cuts his nails or trims his hair—in other words, he feels more comfortable by denuding himself of his beard, moustache, whiskers, or at least of part of the hirsute surroundings of his face. Possibly the man who does not shave his beard suffers less from colds and sore-throats, and this is a consideration worth attending to in this changeable climate of ours. But fashion—or prejudice, as some may term it—is all-powerful with us; and the custom of the army, of the professional man in medicine, and of the Church, doubtless constitutes an example which laymen everywhere follow and imitate.

Shaving in winter is often a sore and annoying process. This is because people do not know how to shave easily and well. First of all the razor must be sharp and keen. Few people can strop a razor properly; those who cannot do so should invest in a stropping-machine, or see what they can do with a hollow-ground razor, which, according to the claims advanced in its behalf, needs no stropping at all. Then let them use boiling water in which to dip the razor before use: a warmed razor shaves easily. Finally, the shaver, old or young, must be particular as to the soap he uses. In time, shaving pastes and creams render the skin tender, therefore a a good soap should always be used.

Such a soap should be over-fatty. It should lather easily and well; and the lather should be permanent. All of these properties, important to the comfort of the shaver, are to be found united in Vinolia Soap. This soap makes a rich, lasting lather with but little trouble, and its super-fatted nature renders it a really emollient preparation for the skin. Once tried, this soap will be always used; and for a toilet soap in other respects we may add it is unrivalled.

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HEIGHT AND WEIGHT IN RELATION TO HEALTH.

THE body weight of adult men ranges from 60 to 70 kilogrammes, according to Quetelet. Krause gives a mean of 64 kilos., Beneke, of 63·074, and Busch, of 65·1. For women the range is 52 to 56; and the mean for men, according to Vierordt, is 65, for women 55, kilos. The average height of young American students of the age of twenty-three years, as determined by measurements of Dr. H. Gihon, is 172 centimètres (68 + inches).

The weight at this age was 61·2 kilos. (140 lbs.), while the weight at this age, as determined by Quetelet, was 64·5 for men and 55·2 for women.

Bernhardt established the following formula: Assuming H to equal the body height, C the circumference of the chest at the mammary line, and W the body weight, then for an average constitution $W = \frac{H \times C}{240}$. When the denominator falls to 209·76, the individual has a feeble constitution; when it reaches 256·8, it indicates a very robust constitution.

It has also been determined that there is a relation between body weight and height which undergoes certain definite laws. The weight reaches its greatest amount at about the fortieth year, and then sinks as old age comes on.

The greatest height is reached at the age of about thirty; then there is a slight decrease, which in old age may amount to 6 or 7 centimetres.

The height and weight of men are, according to Quetelet,

At	Height.	Weight.
30th year	172·2	68·90
40th ,,	171·3	68·81
50th ,,	167·4	67·45
60th ,,	163·9	65·50
70th ,,	162·3	63·03

We give the foregoing figures in connection with some recent observations upon weight, height, and disease made by Dr. J. Foster Bush, Medical Examiner for the American Legion of Honour. In his report for the years 1887 to 1889 he analyzes the mortality statistics of that period, including 1,464 deaths. He gives tables showing the height, weight, and cause of death. He finds that in phthisis, cancer, apoplexy, and renal disease, there was a very large proportion above or below the average of weight to height, and that not more than two or three per cent. hit the mean. In apoplexy, cancer, cardiac, and renal diseases, the greater number were above the average of weight to height; in phthisis the greater number were below.

Gihon's tables show that in a given number of healthy young men about one-fourth are of mean height and weight, while about five per cent. are above or below what is taken as a normal range.

The figures given by Dr. Bush are not of very great value, for he does not state how much above or below the average his cases were, and it is admitted that there is a normal range. They do call attention, however, to the fact that a wide departure from a normal average in the mean height and weight indicates, as a rule, a defective constitution. Physicians would do well, therefore, to make themselves familiar with the physical measurements of their patients.

According to Gihon's table, the height of students at twenty-three is 172 ctm. (66 in.), the weight 63·5 kilos. (140 lbs.).

The mean height of 1,486,039 adults, mostly recruits and soldiers, was 172·08 kilos. (67·75 in.); the average weight of 32,584 adults was 64·55 kilos. (142·30 lbs.); the average chest-girth 87·68 ctm. (34·52 in.) This would indicate for the American constitution, according to Bernhardt's formula, the following:

$$64{\cdot}55 = \frac{172{\cdot}08 \times 87{\cdot}6}{234}$$

which places the male constitution of this country rather below par average.—*Medical Record.*

GLYCERINE SOAP SUPPOSITORIES.—Dr. Schaffer recommends the use of suppositories cut from a cake of glycerine soap as a substitute for glycerine enemata. The soap is said to contain thirty per cent. or more of glycerine, and the remedy is as effectual in this form, he claims, as it is when used pure.

A NOVELTY.—Dr. A. T. Pierson, in some pithy, practical hints on pulpit oratory, says that to be winning is to be wise, but it must not be overdone. He had a friend, an Evangelist, who got into the habit of calling his audience "dear souls." Inadvertently he would say, as he passed from place to place, "dear Belfast souls," "dear Dublin souls," and before he knew it he was saying, "dear Cork souls," which convulsed his Irish audience. The novelty just introduced by Wm. Rankin & Sons (Glasgow and Lisbon) has for its object the administering of comfort and warmth to the "soles" of the people, not only in Ireland, but in all parts of the kingdom. "Rankin's Bath Mats" are used for stepping on from the bath. Cork-wood being a non-conductor is warm to the feet, and these mats, being made of solid cork-wood about one inch thick, prevent chills and colds, absorb the water, and keep the floor dry. They neither rot nor wear, and are ornamental as well as useful in a well-appointed bath-room. They cost only a few shillings and last a lifetime.

STIMULANTS IN WORKHOUSES.—In a recent issue we referred to an important inquiry into the opinion of Poor-law medical officers on the effects of the very remarkably decreased consumption of intoxicants in workhouses. The inquiry arose in this wise: The Chichester Board of Guardians were desirous that their charge for alcoholic liquors should be decreased, and communicated with their medical officer on the subject. He was anxious to know the effect of the diminished use in other unions, and a circular was sent to the various medical officers in England and Wales asking for replies to three questions. The first query was as to the circumstances under which alcoholic drinks were allowed. Of the 244 who replied, 75 per cent. allowed alcoholics only to the sick, 8 per cent. to the aged and infirm, 12 per cent. to the aged, and for extra work, and 5 per cent. never gave any. The second query was as to how the health of the inmates who received no liquor was affected; 203 replied, 73 reporting that the health was improved, 125 that there was no difference in it, 2 that it was worse, and 3 that the sick were worse. In the third question the reporters were asked if the lives of paupers had been shortened, even by a few months; 223 responded, 19 that life has been prolonged, 160 that it has not been shortened, these two groups making over 80 per cent. of the replies; 29, or 13 per cent., are of opinion that life has been shortened, 15, or 7 per cent., that the lives of the sick have been shortened. It is satisfactory to learn that the great preponderance of this body of skilled opinion pronounces the withdrawal of alcoholic beverages to have been unattended by injury to the life and health of the pauper inmates, while the comfort and good order of all have been unmistakably increased.—*British Medical Journal.*

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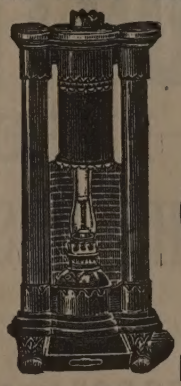

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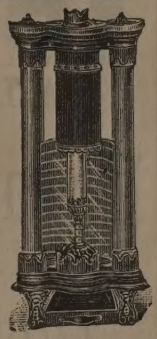

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THE rose is one of the most valuable of the limited series of flowers available to the perfumer. When dried it is useful in sachets or scented powders; distilled, it yields rose-water and the well-known attar; and subjected to enfleurage it gives oil, pomade, and alcoholate. The variety chiefly used is the hundred-leaved *Rosa centifolia*, and is grown for commercial purposes extensively in Turkey, India, and the south of France. The attar of roses is a light yellow or straw-coloured liquid, possessing a high degree of concentration, the characteristic odour of the flower, and a diffusiveness and persistency that render it of great service to the perfumer.

Of the citrine family, consisting of the two great divisions of lemons and oranges, the bitter or Seville orange is the most valuable species to the perfumer. Its flowers yield the attar known as the oil of neroli, or neroly, and by enfleurage a pomade and alcoholate of delightful fragrance. The rind of the ripe fruit contains a useful oil, and the small unripe berries and leaves also furnish one. Another orange of importance is that known as the Bergamia, from which the oil of bergamot is produced. The common lemon gives an essence having both perfume and flavour, while from the citron is taken the truly delightful essence known as the attar of cedrat.

By enfleurage the modest violet yields an odour which is universally admired for its delicacy and sweetness. The chief violet-beds are at Nice, where the plants are bedded in the shade of orange or acacia groves. Approximations of the scent of the violet are found in the acacia, the orris, and in myallwood, a native of Australia. The acacia referred to is a small tree or shrub which grows only in southern latitudes, and the flowers, which are yellow and about the size of a large pea, are cassie flowers. These are treated by enfleurage. Cassie must not be confounded with cassia, which is the cinnamon.

The tuber-rose is a bulbous plant, first noticed by old writers as the Indian hyacinth. The odour is obtained by enfleurage, and is not only a favourite in its pure state, but enters into the formation of the most *récherché* bouquet. France, Italy, and Spain contain the chief gardens of the tuber-rose, although there is no reason why, in this industry, as in so many others, California should not enter the competing field.

The ylang-ylang (flower of flowers) is the blossom of a large tree, native in the islands of the Indian archipelago. Its native Tagal name is the ihlang-ihlang, the Malays call it kanonga, and to botanists it is known as *Unona odoratissima*. The flowers remind one somewhat of the locust blossom. Their colour is a greenish yellow, and they possess an odour resembling a mixture of jasmine and lilac so powerful that it scents the air for miles. The ylang-ylang was first discovered by a chemist at Manilla in 1867. It is now largely manufactured there and at Singapore.

Lavender, rosemary, and patchouly are all herbs. The two former are quite well known in this country; the last-named is an Indian plant resembling our garden sage. To the natives it is known as putchapat, both leaves and stem yielding an attar of great strength and very peculiar odour.

Of the spice series, cloves and cinnamon are the only ones that are much used in perfumery, and these are chiefly employed in soaps. The clove-tree is largely cultivated in the West Indies and the Malacca Islands, while the cinnamon is not the bark of commerce, but comes from a smaller tree, and has a milder odour and flavour, with a faint touch of muskiness. Cassia comes from China, the true cinnamon from Ceylon.

Two odorous grasses, natives of India, furnish attars of extensive usefulness. One is lemon grass, having a strong resemblance in odour to the lemon verbena, and from it nearly all our "extracts of verbena" and "verbena water" are made. The other attar is citronella, a perfume which most persons have made acquaintance with in the so-called "honey soap."

The wood of the sandal-tree, a native of the West Indies, gives a curious odour, greatly admired in Oriental countries and much valued by us. It is both used in substance and distilled for its attar. Vetivert, or kus-kus, a thread-like Indian root, furnishes another perfume of the same class as sandal, but sharper and more approaching floral odours. It is a strong and durable odour that gives its characteristic to the "cashmere bouquet" soap. The attar of vetivert is much higher in cost than even that of roses.

Bitter almonds, though containing no attar in their natural state, yield one by the reaction of their constituents in the presence of water. Thus the still furnishes us the almond odour, which, while sickening in itself, finds a place, in minute quantities, in many of the finest floral compounds.

Vanilla is the capsule of a beautiful creeping plant, native in Mexico and South America. It is generally from six to ten inches in length, about one-fourth of an inch in diameter, cylindrical in shape, tapering toward either end, and slightly flattened. The colour is dark brown. The interior contains a sort of pulp filled with little shining black seeds. Its flavour and odour are both familiar.

The origin of ambergris was long a mystery, but is now known to be a diseased secretion of the spermaceti whale. It is found floating on the surface of the sea, and has an odour which is extremely unpleasant when pure, but which gives mellowness and permanency to mixtures.

Musk is also a secretion, and is obtained from a musk deer, a pretty little animal inhabiting the higher mountain ranges of Tonquin, China, and Thibet. The musk is found in a small pocket or pouch under the belly of the deer, and, being cut off by the hunters, becomes hard and dry and preserves its contents as an unctuous powder of a reddish-brown colour. Its powerful, warm, aromatic odour blends well with every other scent, and gives them permanency without being intrusive.

TO PRESERVE FLOWERS.—Ladies who surround the stems of their corsage bouquets with moistened powdered willow charcoal, which may in turn be wrapped in moss or cotton, will find their flowers remaining fresh long after the departure of all beauty from those of their less thoughtful neighbours. The same substance placed in the bottom of the vase in which flowers are kept will be very useful, provided the stems are cut off with a sharp knife once or twice a day.

CHEMICAL ANALYSIS.—DR. DRINKWATER, Lecturer on Chemistry in the Edinburgh Medical School, undertakes the Analysis of Water, Foods, Wall-Papers, and of all other products and articles connected with Household Health and Commercial Interests. Terms on application to Dr. Drinkwater, Chemical Laboratory, 41, Chambers-street, Edinburgh.

Public Health

"Health is the first Wealth."—*Emerson.*

THE GERM THEORY IN CONSUMPTION.

"WHAT Changes has the Acceptance of the Germ Theory made in Measures for the Prevention and Treatment of Consumption?" is the title of an essay by Dr. Charles V. Chapin, of Providence, to whom was awarded a premium of 200 dollars by the trustees of the Fisk Fund. In this essay Dr. Chapin has given an admirable *résumé* of all that has been written about consumption from the time of Hippocrates to the present day. After a careful examination of the literature of the subject, he thinks that we are justified in the conclusion that the acceptance of the germ theory has made no direct or important addition either to the hygiene or medicinal treatment of consumption.

He thinks, however, that it should have great influence. It tells us plainly what we ought to do. We simply do not obey its behests. The germ theory,—now no longer a theory in the case of tubercular consumption,—tells us that we have to do with a contagious disease. Now, there is no theoretical reason why a purely contagious disease like tuberculosis cannot be exterminated. If we can prevent the spread of contagion at all, we can prevent it entirely. The enormous value of preventive measures, isolation, disinfection, and quarantine, is well illustrated in the history of cholera, typhus-fever, and yellow-fever in the United States. By keeping out the virus of these diseases, or destroying it when it had gained access to our shores, we have for a number of years been remarkably free from these diseases, and it is certain that if these precautions had not been taken we should have suffered severely.

For obvious reasons the suppression of tuberculosis is not so easy a matter as the suppression of cholera or yellow-fever. Neither is the suppression of scarlet-fever or small-pox as easy. Yet wherever the public have been educated to a correct appreciation of the contagious nature of scarlet-fever, the number of cases has diminished very much. Even in small-pox, with its virulent contagion, it is possible, by means of isolation and disinfection, to check its spread even among an unvaccinated population, as has been illustrated many times of late in the anti-vaccination city of Leicester, England. We must now put tuberculosis among these diseases, and, though its theoretical suppression is simple, its actual extermination is a very difficult problem. It lies largely with the medical profession how long tubercular disease shall decimate the human race.

The physicians are the educators of the people in these matters. When the doctor shall teach that tuberculosis is contagious, the people will believe, and will govern themselves accordingly. In combating contagious diseases the preventive measures taken often give discouraging results. This will be particularly so in tubercular disease. Half-way measures secure less than half-way results, and these alienate the support of those who only indifferently believe in contagion and the importance of precautionary measures. Efficient means of suppression are radical, and bear hard on the individual: they are not complied with, and they produce violent opposition. Yet, difficult as it may be, the medical profession should take aggressive action against this disease. We have no right to wait for the discovery of a specific, or the gradual evolution of a phthisis-proof race. We must take the world as we find it, full of men and women predisposed to tubercular phthisis, and with no idea of its contagious nature. What can we do about it?

1. Teach the people the true nature of tuberculosis; that no one ever has tubercular consumption unless the tubercle bacilli find their way into the lungs.

2. Teach them also, that, even if it finds its way there, it will not grow unless the conditions are right. Teach fathers and mothers how to rear healthy boys and girls. Tell them what to eat and what to wear, to exercise, to breathe fresh air. This alone would exterminate phthisis.

3. The contagion must be destroyed. Fortunately in this disease there is no need of isolation. Disinfection is enough. The consumptive patient gives off the poison only in the sputum, or perchance the other excreta, if the disease extend beyond the lungs. The virus is not given off from these while moist. We must therefore disinfect all sputum at once with mercuric bi-chloride. Cloths must be used instead of handkerchiefs and then burned; or, if the latter are used, they should be often changed, and immediately put in a bi-chloride solution and boiled. Bed-linen should be treated in the same way. Frequent disinfection of the entire person, and fumigation of the apartment, would be safe additions to the preventive measures.

4. Persons who have a marked predisposition to the disease had best not come in close contact with the phthisical. Children should never have tuberculous nurses, wet or dry. In the case of consumptives very great attention should be paid to ventilation, and to the alimentation both of the patient and the attendants.

Such measures, if rigidly carried out, would be of enormous service in preventing this disease. But with the increasing prevalence of tuberculosis among domestic animals, something more is imperatively demanded. Active measures should be taken to free the country from animal tuberculosis. The proper authority for dealing with this, as with all other contagious diseases of animals, is the Bureau of Animal Industry of the Department of Agriculture. It is a wasteful method for States to act independently. The powers and expenditure of this bureau should be greatly increased, and it should take active measure against this disease. The exact measures suggested are,—

1. The reporting of all cases of tuberculosis in domestic animals to the proper authority, by both owners and veterinaries, or other persons having a knowledge of the same.

2. The slaughter of all infected animals, and the isolation and slaughter of all exposed to infection. The government should partially indemnify all owners of slaughtered cattle.

3. Thorough disinfection of all buildings occupied by diseased cattle.

4. The confiscation of the flesh and milk products of all tuberculous animals.

IF there is ever a time in life when a man gets thoroughly disappointed it is when he persuades somebody to get him up a dinner of things he used to like best when he was a boy.

SPECIAL NOTICE.—The BEST STIMULANT for dietetic and other purposes is the "SKERRYVORE" (Registered) Blend of Fine Matured Scotch Whiskies, certified of the UTMOST PURITY by Mr. E. G. Clayton, F.C.S., Member of the Society of Public Analysts. Sold only by JOHN TWATT, 36, Argyle-place, EDINBURGH. Price 20s. per gallon, bottles and cases included.—[ADVT.]

Healthy Houses

"A happy home must be a healthy home."—*Anon.*

RENTED HOUSES.

QUITE a large number of people, says the *Sanitary Record*, are obliged to live for part or all of their lives in rented houses, and it may be well to point out some of the commoner sanitary defects found in such houses.

An experienced renter will know that it is easier to secure changes before than after renting a house, and, if conditions detrimental to health are found which the owner of the house will not change, another house may be chosen.

It is frequently the case that, in selecting a house for rent, little or no attention will be given to its sanitary condition. The average renter looks to the number and size of the rooms, to some extent to the amount of light admitted to them, to the size of the lot, and to the condition of the outbuildings. He may, perhaps, look at the cellar, but is usually content to know there is one. If the house has plumbing fixtures, he will examine the bath-tub, note the existence of a water-closet, and then make up his mind as to whether or not he wants the house. If the house is in a good neighbourhood, has ample closets and a big pantry, the feminine portion of the household will probably decide in favour of the house. Except as to the size of rooms and amount of light, nothing which might determine the healthfulness of the house has been considered, and these were looked into on account of comfort and not of health.

The carelessness in renting houses, due in great part to ignorance, often results most seriously, and many a life has been sacrificed which a thoughtful care might have saved.

We recall the following instance as coming under our observation:

A travelling man called us to see his child, which was ailing. His family consisted of a wife and three children, and he had moved to his present home about two weeks before his child was taken sick.

The house he occupied had the reputation of being an unhealthy house, and he was so informed. He had moved into it without examining its sanitary condition. On inspection, it was found that the cellar and foundation walls were damp, a few pools of water standing in holes in the floor. Part of the back end of the cellar was walled off and converted into a privy-vault, which was enclosed under the kitchen roof, and opened into the kitchen by a loosely fitting door. The vault was cemented, but had only recently, before the family in question had moved in, been connected with the sewer. A six-inch sewer-pipe opened into the vault about eighteen inches above the bottom of the vault, and there was consequently always a collection of excremental matter in the vault. *There was no trap between this vault and the main sewer with which it was connected.*

The man was advised to vacate the house at once, but this he was unwilling to do. During the next year members of the family were constantly sick. The man's sister and sister-in-law, who visited him, had each a spell of sickness, and none escaped except the man himself, who was seldom at home. His wife had an abscess of the lower jaw, resulting in fistula, which for six months resisted all treatment. Finally, the amount of his doctor's bill convinced the man he had better move, and the family went into a new, dry, well-built house. The fistula, which could not be closed, healed of itself in a very short time, and our professional visits to that family during the next year did not reach half a dozen.

It is not often that even the most careless or ignorant of men would move into a house like the one described; but there are many things to be avoided in selecting a dwelling-house, and to some of these we wish to call attention.

To commence with the premises. Select as large a lot as possible, which is not wet in moderately dry weather. If the house is new, look to it that it is not built on "made" ground; such a site is usually unhealthy. Avoid very old houses where there is evidence of slops and wastes having been habitually thrown upon the ground near the house. In such cases there is great pollution of soil, and the drinking-water, if from a well, or the air which is drawn from the ground into the cellar, is in danger of contamination by foul gases and decomposing organic matter.

Next in order will be the well, if such is the source of drinking-water. The well should not be located near a privy-vault or cesspool, especially if the latter is uncemented; nor in a loose, porous soil. The limit of safety in this case is probably not less than seventy five feet. Do not fall into the error a certain sanitary policeman recently committed. He had been sent to inspect the sanitary condition of a house in which a child was sick with diphtheria. He was evidently posted on the pollution of drinking-water, and gravely measured, with a tape line, the distance between the well and the privy-vault. This being considerable, was satisfactory, and he was going away, when his attention was called to a vault in a neighbour's yard, just over the fence from the well. He had not thought of that. So, do not forget to look to the condition of neighbouring premises and the location of privy-vaults, &c. The well should be protected by a good curbing from inflow of surface water. A very careful man would have a sample of the water examined. A few simple tests could be easily made by himself.

Next, inspect the cellar. This, for healthfulness, is one of the most important parts of the house. It should be clean, dry, and ventilated, and as light as possible. An impervious cellar floor is a great recommendation.

If there is a house-drain connecting with a sewer or cesspool, ascertain, if possible, that it is not leaking and saturating the ground with filth.

Look to all the traps, to be sure they are in good working order. If there is a heating furnace in the basement, it will bear attention, and its capacity, source of pure air supply, &c., should be noted.

If possible, select a house in which all the living and sleeping-rooms will receive direct sunshine during some part of the day. Rooms cannot be too light; and especially should the rooms which the women and children will have to occupy during the day be bright and cheerful.

As houses are ordinarily constructed in the North, an open fire-place is essential for good ventilation.

If the house contains plumbing fixtures, such as bath-tubs, water-closets, wash-stands, &c., special care will be required to be certain that all these are in a proper condition to prevent the entrance of air from the sewer—the so-called sewer-gas. By far the safest plan, where there are many such fixtures, is to have a reliable plumber to inspect the plumbing and ensure it.

Other things of less importance could be mentioned, but if people renting houses would only look carefully into the matters we have named, much sickness might be prevented.

Popular Science Papers

"Blessings on Science! When the Earth seemed old,
When Faith grew doting, and our reason cold,
'Twas she discovered that the world was young,
And taught a language to its lisping tongue."

—*Charles Mackay.*

RECENT THEORIES CONCERNING FEVER.

By Dr. Austin Flint.

In the human body, and in the warm-blooded animals generally, there is a certain temperature, fixed within quite restricted limits, which is constantly maintained in health. In man the temperature of the blood is between 98 degs. and 100 degs. Fahr. The temperature under the tongue and in the armpits is about 98½ degs., with a normal range of variation of about 0·5 degs. below and 1·5 degs. above. The hibernating animals present a very considerable depression in temperature during their winter sleep; but with this exception the general temperature of the body in warm-blooded animals cannot remain depressed for any considerable length of time without death. The human organism cannot resist a continuous internal temperature of 104 degs. for more than a few days; and it is true, as a rule to which there are few exceptions, that an internal temperature of 108½ degs. is fatal.

Within the body there is an oxidation of matter which produces heat: the animal temperature is moderated by loss of heat from the general surface and the lungs; and, finally, the balance between the production and the loss of heat is regulated by the nervous system. When this balance is so disturbed that the heat-production is in excess of the loss, there is an elevation of temperature, and this is known as fever. It is the mechanism for the regulation of the heat of the body which is disturbed in prolonged exposure to external heat, as in sun-stroke, in which there is no excessive production of heat in the organism. This is quite different from what is ordinarily known as fever, the high temperature being produced by external causes only.

Apart from the so-called thermal fever, ordinarily known as sun-stroke, physicians have recognized two varieties—one due to some general agent and known as an essential fever; and the other called symptomatic fever, being secondary to some extensive local inflammation. That there is a difference between these two conditions in many instances there can be no doubt; but this difference in many cases is not so sharply defined as was once imagined, for it is almost certain that agents producing fever are developed in inflamed parts and carried over the system by the blood. In true symptomatic fever, however, the local inflammation is primary and due, perhaps, to an injury; while in an essential fever the fever is primary, and whatever local inflammations are developed are secondary, or consecutive.

It may be assumed that all the essential fevers are produced by micro-organisms. In typhoid, which may be taken as the type of essential fevers, this organism is called the typhoid bacillus. It is thought that this bacillus is introduced into the body, frequently in infected water, and that it produces a poisonous substance called ptomaine, which is the immediate cause of the fever with its attendant phenomena. Precisely how the elevation of temperature is produced by this poisonous agent is not understood, but of the fact there can be no doubt.

Typhoid fever belongs to the class of self-limited diseases. It runs its course in a certain number of days, when the poisonous agent disappears, and leaves the system to recuperate from the shock it has sustained. Restricting the term fever to the increase in the temperature of the body, a question of the first importance to determine is that of the mechanism by which this increase in temperature is produced. A study of this question has contributed more than anything else to a system of rational treatment.

It can hardly be doubted that excessive heat-production is an element invariably present in the essential fevers. The excess of heat involves, of course, excessive oxidation. Disturbances in the processes of digestion prevent an adequate supply of matter from without to meet this excessive oxidation; and, of necessity, the body itself is consumed and there is loss of weight. An important factor also in the production of the fever is disturbance in the processes by which the heat of the body is moderated. While the mechanism of the fever involves an abnormal production of heat, which cannot be prevented, either there is no increased activity in the cooling processes, notably evaporation from the skin, or the cutaneous transpiration is very much diminished. It is not probable that there is a primary affection of the nerve-centres which regulate the animal temperature, although these may be secondarily affected. The poison in the blood induces excessive heat-production, and this continues until the poison is eliminated or destroyed. The poison disappears after a certain time in typhoid fever as in all self-limited diseases; but there are no means known to physicians by which this can be promoted or the effects with certainty counteracted, as in the case of antidotes to mineral and other poisons. As a rule, in typhoid fever the toxic agent produces certain effects which continue for a limited time. The secondary effects of the fever-producing cause may be counteracted or moderated, but the elimination of the cause by measures of treatment has not been as yet effected. Nevertheless it is not to be supposed that this will be impossible in the future of medical science.

It is interesting to contrast the picture of a typhoid-fever patient with that of a person who is normally producing an excessive quantity of heat. In the case of fever, the relentless production of heat continues, and is beyond the control of the physician. The patient is lying in his bed, doing no work, incapable for the time of doing work, and yet processes go on which are consuming his body in the production of this excess of heat, and his tissues in a measure are passing away. Those parts of the tissues, indeed, which remain are undergoing degeneration. The excess of heat cannot be converted into force, and the tissues suffer because an adequate supply of fuel in the form of food is impossible. The safety-valve of the skin, which normally moderates the body-temperature, is closed. Experiments have shown that the passage of heated blood through the heart is largely responsible for the rapid action which is characteristic of fever, and it is more than probable that the hot blood circulating in the substance of the heart itself produces those degenerations which lead to so-called heart-failure.

In contrast to this diseased condition is the picture of a man producing an excess of heat by vigorous muscular work. Here there is increased oxidation, and an excess of heat produced; but a large part of this excess is converted into force, and there is increased action of the skin, which keeps the heat of the body within restricted limits. The matter consumed is supplied by food, and the body itself is not wasted, or if in part consumed, is promptly repaired. While the actual heat of the body

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may be raised, this is but temporary and does no harm. In very violent exercise, as in fast running, the increased production of heat may be so rapid that it cannot be entirely compensated by evaporation from the skin, and the temperature has been known under these conditions to rise to 104 degs., which is a high temperature for typhoid fever; but in the course of a little more than an hour it falls to the normal standard.

In health, when the body is subjected to excessive cold, the normal temperature is maintained, not only by retarding the radiation of heat from the surface by appropriate clothing, but by an actual increase in the production of heat. This is promoted by muscular exercise, and the material necessarily consumed is supplied by what, under ordinary conditions, would be an excessive assimilation of food, particularly of fatty matters, which have a high heat-value when oxidized.

Most important of all considerations are the applications of the prevalent views of the cause and nature of fever to its treatment. Beginning with the normal processes involved in the production of animal heat, it may be stated succinctly that a certain number of heat-units are produced, chiefly by oxidation, and that the matter thus oxidized is supplied by food. The temperature of the body is kept at the normal standard by regulation of heat-dissipation, chiefly by the skin.

Restricting the consideration to typhoid, a toxic agent, probably the product of a special microbe, sets up an excessive production of heat, attended with impaired compensating action of the skin and serious trouble in digestion and assimilation. The life of this toxic agent is restricted within certain limits. The objects of treatment are to prevent death, and to secure and promote speedy and complete canvalescence. Death may occur from the exhausting effects of a prolonged high temperature, or from certain accidents immediately or indirectly due to the same cause.

In a great majority of cases of typhoid fever, if not in all, the typhoid bacillus finds its way into the system through the alimentary canal. The fact of its introduction can be definitely ascertained only after the diagnostic features of the fever have presented themselves in an unmistakable form. However, there are few physicians who have kept pace with modern clinical investigations who have not occasionally observed the good effects of thorough disinfection of the intestines early in typhoid. Even if it be not admitted that the disease can be arrested in this way, in some cases it runs a short and mild course. Theoretically, it may be assumed that it is possible to destroy a certain number of the microbes in the intestines before they have had time to find their way into the general system.

Assuming that the typhoid poison, once in the system, must run its course, that the fever cannot be aborted, and that the general effects are due, directly or indirectly, to a prolonged high temperature, a rational measure of treatment is to reduce temperature, and to keep it within certain limits, if it cannot be brought to the normal standard. This question is the all-absorbing one of the present day in the treatment of the essential fevers.

(To be concluded.)

La Clinique gives the following instructions for the removal of gunpowder stains from the hands of sportsmen. The pigmented skin should be washed with distilled water containing half its own weight of biniodide of ammonium. The colour then changes to red, and the red stains disappear on the application of a little dilute hydrochloric acid.

THE HEARING OF SEAMEN.

Dr. Francis E. Cane writes as follows in the *Lancet*:—The attention of the medical profession has frequently been directed to colour and vision tests for seamen, but the subject of testing their hearing has so far remained unnoticed. In these days of fast and prospective faster steamships the matter of correct hearing is becoming of even of more vital importance. Our steamers frequently encounter fog for hours, days, and even weeks; but the only means of making their approach mutually known is by some device affecting the sense of hearing. The method of fog signalling at present suggested by the Board of Trade, and employed by steamships, is sounding a prolonged blast with a loud whistle every two minutes. These whistles have not been standardized.

This system of signalling has the grave disadvantage of giving no information as to the course followed, or what either vessel intends to do in order to avoid the other. Navigators are alive to the shortcomings of the present plan, and many suggestions have been made. Captain J. Campbell, in the July (1888) number of the *Mercantile Marine Service Association Reporter*, suggests an ingenious and simple code for fog signals at sea, based on the use of shrill and bass whistles. He divides the compass into eight inclusive courses or octants, and has for each a different arrangement of the high and low sounds, never exceeding three blasts, to act as a permanent signal indicative of the course followed, a single long-continuous bass or shrill whistle denoting respectively that the course is directed to port or starboard.

This system could easily be committed to memory by any sailor intelligent enough to box the compass, and would offer far less difficulty to the mind than learning the ropes or the simplest telegraphic code. It would supply information as to whether the other vessel was pursuing a similar, opposite, or cross course, and what the vessel was doing with her helm. From all this may be learned how dependent seamen are on their sense of hearing in foggy weather. But while the Board of Trade and certain leading steamship companies adopt tests for vision and colour-blindness there has hitherto been no suggestion or thought of tests for that sense on which so much depends in the most dangerous of positions.

Sailors are particularly liable to acute and subacute ailments of the ear, but there are no proper statistics on the subject. My own experience leads me to think that much information might be obtained by systematic collective investigation, not only afloat, but at the various seamen's hospitals and dispensaries on shore. Not alone is it important that masters, mates, and men should be examined and tested for healthy hearing, but they should be acquainted with the extent to which they can trust their hearing. This is shown in the mistake made by a writer of some authority in seamanship when dealing with the subject of fog-signal codes in the September (1888) number of the nautical magazine already quoted from. He says that it is not necessary to denote the course taken if the signals indicate what is being done with the helm, and then he goes on to say: "If I am steering through a dense fog and hear a whistle ahead or on the port bow, I at once put my helm hard-a-port and blow one blast. If I hear a whistle on my starboard, I put my helm hard-a-starboard and blow two blasts." Here the writer asserts that the direction from which a sound comes can readily be made out so as to justify immediate action.

A similar statement is made in an article on fast steamships in the June (1888) number of the *North American Review*. So far from this being the case, we

know, from experience, physiology, and acoustics, popularly exemplified in ventriloquism, that the direction from which sounds proceed is difficult to ascertain. The difficulty is increased in fog and darkness, when hearing loses the assistance of other senses and has no previous knowledge of the position of the sound's source. It does not take much knowledge of acoustics to know that density of fog, layers of varying density in the atmosphere, direction of wind, echo or reflection of sound from sails, masts, and funnels, together with a host of intricate external influences, all combine to change the direction of the transmitted sound.

But if these difficulties are present with the normal ear, how much more likely if the officers or seamen are dazed from want of sufficient sleep or from long hours of nervous tension through continued anxious watching. Suddenly aroused from insufficient sleep, seamen come from a warm cabin to the cold deck or bridge, where they are for many hours exposed to all weathers, often in damp clothing. This long list of difficulties takes on its most serious aspect when we come to study the pathological conditions likely to prevail. We may find wax, growths, or foreign bodies in one or both ears, giving inequality of hearing. We may find otitis, otorrhœa, thickened membranes, Eustachian difficulties, syphilitic or other disease of the bones, affections or diseases of the nerves, or, in fact, deafness or defects in hearing on one or both sides from any cause whatever.

Very much more might be written on the hearing of seamen, but the aim of this paper is to direct attention to the subject on lines capable of being enlarged, to suggest further investigation, and to show that only men of normal hearing and a proper understanding of their power should be entrusted with lives and property, which might often depend on the sense of hearing alone for safety in the most dangerous of all the perils encountered at sea.

A LITTLE girl, nine years old, having attended a soirée, being asked by her mother on returning how she enjoyed herself, answered: "I am full of happiness. I couldn't be any happier unless I could grow."

HOW TO TREAT GOUT.—A hot Pumiline Bath should be given daily; followed by frictions of the whole body with the Pumiline Essence sprinkled on a woollen glove. Dose—Three drops of the essence are to be taken thrice daily. Cotton wool is to be sprinkled with the Essence and the painful part covered with a warm flannel, with a piece of oil silk over the cotton. This treatment, in cases of acute gout, should be repeated three or four times a day, so that the cotton wool be always moist with the Pumiline Essence. Stern's Pumiline Essence is that which should be asked for at all chemists.

FIFTH EDITION.—NOW READY.—GREATLY ENLARGED, AND COMPLETELY REVISED.

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This pamphlet, now being issued in its FIFTH EDITION, forms a complete refutation of quackery of all kinds, and is a safe and reliable guide, from the medical standpoint, to all young men. EVERY YOUTH should read this pamphlet as a guide to the safe conduct of life in a moral and physical sense. Full directions for the treatment of "Nervous Debility" so-called, and allied ailments, are also given. Thousands of sufferers have welcomed this pamphlet as a veritable beacon-light to health and purity of life.

Jottings from the Journals

"Th' ingredients of health and long life are
Great temperance, open air,
Easy labour, little care."—*Sir Philip Sydney.*

Open-air Travel in Consumption.—Dr. H. I. Bodwitch, of Boston, says, the *Lancet*, read an interesting paper before the American Climatological Association to prove the value of open-air travel "as a curer and preventer of consumption," basing his remarks upon the records of a journey taken in 1808 by his father, then thirty-five years of age, and threatened with that disease—cough, hæmoptysis, anæmia, diarrhœa, general malaise, fever, and debility being the indications. In this state of health he started with a friend on a tour through New England in a one-horse chaise. After the first day's travel—of twenty-five miles—he was so exhausted, and had so much hæmoptysis, that he was advised to return "to die;" but he courageously pushed on, and every day brought him improved health. The benefit thus received made him resolve thenceforward to take daily regular open-air exercise; and when in 1838 he died, at the age of sixty-five, from carcinoma of the stomach, one lung presented "evidences of an ancient cicatrix at its apex, both being otherwise normal." Dr. Bodwitch also states that his father married his cousin, who died of chronic phthisis in 1834. Of eight children, two died (at the age of eleven and at birth respectively), but all the others are either now living or arrived at adult life and married, and of the ninety-three direct descendants of his father not one is phthisical. This, Dr. Bodwitch thinks, must be largely attributed to the above-named journey, and the subsequent careful regulation by his father of his own health and that of his offspring. We may append a few of the practical remarks which Dr. Bodwitch deduces from his own family experiences:—"For my own part, I fully believe that many patients now die from want of this open-air treatment. For years I have directed every phthisical patient to walk daily from three to six miles; *never* to stay all day at home unless a *violent storm* be raging. When they are in doubt about going out, owing to 'bad weather,' I direct them to '*solve the doubt*, not by staying in the house, but *by going out*.' A cloudy day, or a mild rain, or the coldest weather should not deter them. If the weather be very cold, let them put on respirators before leaving the house and be thoroughly wrapped in proper clothing for the season. I direct them never to stand still and gossip with friends in the open street, as by so doing they are much more liable to get a chill than while walking. Hence, summer and winter alike, my patients usually get plenty of fresh air uncontaminated in a great part, at least, by the previous breathing of it by themselves or by other occupants of the house. This course, I believe, might be pursued in any part of our common country. I am certain that I know of patients who have become well and able to attend the business of life under this course. May we not also at times send our patients over short distances in open vehicles, instead of thousands of miles off in ill-ventilated cars to an entirely different climate? Have any of us ever sufficiently tried this open-air journeying *at home*, so to speak—that is in the region of the country where the patient lives, wherever that may be?" There is sound common sense in these words.

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The Pathology of Scandals.—The unsavoury enterprise of the modern newspaper is constantly bringing to public notice instances of the weakness and sinfulness of human

nature. The clergy, as a body, receive perhaps more than their share of notoriety, for if any ordinary man lapses a little it is thought to be something reasonably to be expected. A clergyman, however, who appears to have wandered from righteousness is the subject of the biggest kind of headlines. It has been often said among physicians that strong religious feeling is usually united with a good deal of erotic fervour. This is, however, only measurably true. Religion appeals to the emotions, and successful preachers must cultivate perhaps unduly the emotional side of their character. The sexual feeling rises with the common emotional tide, but it is much less dominant than among artistic professions, where pure æsthetics is made the chief end of life and moral restraints are only secondary. The libertinism of the votaries of art in its various phases is a thing about which there is not much dispute, and it is amusing to learn that a certain prominent actor keeps a scrap-book containing a record of all the clerical scandals published in the daily press. The practice of medicine tends to promote intellectuality and mental equipoise, so that medical history is rarely stained with records of misapplied confidence or scandalous violations of decency. Yet no one better than the physician knows how erring is human nature, and how full of temptations is the lot of any man who gains any degree of popularity or prominence. There exist in society a considerable number of men whose chief object in life is the gratification of lust, and who spend much of their time simply in devising ways of satisfying passion. Such characters as Smollet's Count Fathom exist plentifully to-day, though modern novelists hardly venture to depict creatures so loathsome. These men are generally originally depraved; and modern alienists would place many of them among the moral imbeciles or paranoiacs. But there are, unhappily, women of the same type; perhaps not so vicious, but much more weak. Large cities contain many of them, and they develop among the religious congregations as well as in the audiences of theatres. When one of them is struck with an erotic passion for her favourite clergyman or actor there is trouble ahead; and if the man is indiscreet or has enemies watching, a scandal surely follows. One basis for scandals is insanely erotic women, therefore, and not necessarily bad men. In justly estimating the merits of those cases involving the character of men who have lived lives without reproach, the pathological element of nymphomania ought to be considered. In some other cases the scandal is but the evidence of an incipient insanity, as in the case of a prominent lawyer who, in the early stages of paresis, went about making improper proposals to several of his respectable lady acquaintances. Scandal may be a sign of disease as well as of vice.—*Medical Record.*

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Origin of Strong Liquors.—Strong liquors are a modern invention. The ancients knew of nothing more powerful than lightly fermented wines, and have left warnings enough of the abuse of them. Alcohol was not discovered till the seventh century, although an older story exists of a monk, Marcus, who collected and condensed in wool the steam of heated white wine, and then pressed out from the wool a balsam which he applied to the wounds of those who fell at the siege of Rheims in the reign of Clovis I. He also mixed this balsam with honey and produced a cordial which brought the moribund back to life. Clovis, however, did not wait for the approach of death before claiming his share of the cordial. According to Dr. Stanford Chaélle, the distillation of spirit from wine was not discovered until the twelfth century, and spirits did not come into common use until the fifteenth, sixteenth, and seventeeth centuries. Professor Arnoldus Villanova, in the fourteenth century, made a panacea of the water-of-life, which gave sweet breath and fortified the memory, besides being good for sore eyes, the toothache, and the gout, and having other wonderful properties. Distilled spirits came into use in London in 1450, and had to be prohibited in 1494. Michael Savonarola produced a treatise on the making of the water-of-life in the fifteenth century, which became a standard authority on the subject, and was followed by the work of Matthioli, of Sienna. These books gave the start to brandy making in Italy, whence the trade extended to France. About 1520 the Irish usquebaugh began to acquire reputation in England. Before 1601 "brand wine" had begun to be distilled in the Low Countries from apples, pears, and malt; and in that year an ordinance was passed at Tournay forbidding the sale of the liquor except by apothecaries, "partly because of the dearness of corn and partly because of the drunkenness which this cheap brand-wine caused, to the great prejudice not alone of homes and lives, but to the extreme danger of the souls of its drinkers, many of whom had died without confession."

DRY CELLARS.—A problem which the builder, owner, and architect has to deal with every day is to render a cellar dry. This may be done in a variety of ways, which will depend upon the circumstances surrounding the case. One of the most effective means of keeping a cellar dry is to build an area wall around the whole of the site, so that earth does not rest directly against the walls of the house. To form such area a four-inch wall is built parallel to the main walls, and about two inches from them. The bottom of the enclosed space is formed into a gutter, so that any water that finds its way through the outer casing may have an opportunity of running away to the drains. The top of the cavity is usually covered in just above the ground line with a row of ornamental bricks or sometimes with bricks laid on edge. When these means are adopted, it is desirable that openings in the main wall should be provided for ventilation.

USES OF SOAPSTONE.—A writer in a London journal calls attention to the unappreciated uses and preserving qualities of soapstone, a material, he says, which possesses what may be regarded as extraordinary qualities in withstanding atmospheric influences, those especially which have so much to do with the corrosion of iron and steel; it being a well-known fact that the inside of a steamer which is not exposed to the action of salt water, like the bottom, corrodes much more quickly than the outside. It has, too, an additional quality in this line, one which adapts it in a remarkable degree as a protective point for ships, and this is the extreme fineness of its grain; indeed, ground soapstone is one of the finest materials producible, and, from experiments made, it is found that no other material is capable of taking hold of the fibre of iron and steel so readily and firmly as this. It is also lighter than metallic pigments, and on this account, when mixed as a paint, is capable of covering a larger surface than zinc white, red lead, or oxide of iron. In China soapstone has long been largely used for preserving structures built of sandstone and other stones liable to crumble from the effect of the atmosphere; and the covering with powdered soapstone in the form of paint on some obelisks in that country composed of stone liable to atmospheric deterioration has been the means of preserving them intact for hundreds of years.

IMPORTANT ANNOUNCEMENT.

A NEW VOLUME BEGAN WITH THE NUMBER FOR FRIDAY, OCTOBER 4th, 1889.

BONUSES TO SUBSCRIBERS TO "HEALTH."

HEALTH, as our readers are aware, may be obtained of all Booksellers and Newsagents, and at the Railway Bookstalls, on the day of publication. It may also be ordered from the PUBLISHER, 2, Paternoster-square, London, E.C., who will send the journal, post free, for a year, on receipt of postal orders for 10s. 10d.

As many of our readers who live in remote districts prefer to obtain HEALTH from the Publisher direct, and as we are desirous of increasing the already large number of subscribers who give us a yearly order for the journal, we offer the following FREE GIFTS and BONUSES to all who subscribe to HEALTH for one year or longer :—

(1.) To each Subscriber who remits 10s. 10d. to the Publisher, entitling him (or her) to receive one copy of HEALTH, post free, for one year, we shall present a copy of Dr. Andrew Wilson's work, entitled "A Manual of Health Science" (Longmans & Co.), value 2s. 6d.

(2.) To each subscriber who remits 21s. 8d., entitling him or her to receive two copies of HEALTH weekly, post free, for one year (or one copy for two years), we will present Dr. Richardson's "Ministry of Health" (Chatto & Windus), value 6s. The copies of HEALTH so ordered may be posted to separate addresses.

(3.) To each person who subscribes 32s. 6d., for three copies of HEALTH, post free, weekly, for one year, we will present the volume by Dr. Richardson mentioned above, and also the handsome, illustrated book entitled, "Studies in Life and Sense," by Dr. Andrew Wilson (Chatto & Windus), value 6s.—being a free gift of the total value of 12s.

The bonus last mentioned will also be presented to anyone who succeeds in obtaining three yearly subscribers to HEALTH, and who remits to the Publisher the sum of 32s. 6d., together with the names and addresses of the persons to whom the copies are to be posted each week.

As the literary gifts above-mentioned constitute books containing solid and reliable information regarding health and other matters of popular scientific interest, it will be seen that the above scheme, while intended to increase our already large circulation, also offers distinct advantages to new subscribers who guarantee by their subscriptions a year's support to this journal. All communications regarding subscriptions and other purely business details connected with HEALTH should be addressed directly to the PUBLISHER, 2, Paternoster-square, London, E.C., and *not to the Editor*.

A SECOND SARAH.—Under this caption the St. Louis *Post-Despatch* of October 15th prints the following special from Fort Smith, Ark. :—"Yesterday a woman living in the mountains here, named Sarah Gates, aged seventy-one, proved herself a second Sarah by giving birth to a well-formed and healthy male child. Two years ago Mrs. Gates, then a widow, married William Gates, a young hired hand on her farm. The case is exciting a good deal of interest among physicians." A correspondent from Little Rock suggests that this remarkable tale should be investigated by some of the Fort Smith physicians, who are said to be interested in the occurrence. We should be glad to hear from any one who has any knowledge of the actual facts in the case.

AH LI, by birth a Chinaman, by profession a dentist, has set foot on American soil and practises on his suffering countrymen in New York. His methods are somewhat primitive, but he is popular. His operating chair is a common camp-stool, and there is a smaller stool of the same height for the foot of the dentist to rest on. The head of the patient is occasionally brought upon Ah Li's elevated knee, and upon his right hand is his operating case containing curious and quaint instruments. The rapidity with which Ah Li extracts a decayed tooth is astonishing. A certain liquid preparation of a whitish nature is first put upon the doomed tooth to deaden the pain and to "loosen the root." The filling of the cavities is accomplished with great rapidity with a substance like tinfoil.

Our Letter-Box

"Conference [maketh] a ready man."—*Bacon.*

NOTICES TO CORRESPONDENTS.

All Communications for the Editorial Department (including Books for Review, Specimens of Sanitary Appliances, &c.), to be addressed to "THE EDITOR OF HEALTH," 2, PATERNOSTER-SQUARE, LONDON, E.C. Those intended for the Publishing Office to be sent to MR. A. P. WATT, THE PUBLISHER, at the same address.

RULES FOR CORRESPONDENTS.

OWING to the mass of letters which reaches us each week, we respectfully direct the attention of Correspondents, desiring replies in the LETTER-BOX DEPARTMENT of HEALTH, to the following rules :—

1. **All questions are answered free of charge in the columns of HEALTH. A limited space only, is available for the insertion of replies each week.**
2. **All letters must be legibly addressed to "The Editor of HEALTH, 2, Paternoster-square, London, E.C.," *and to no other address.***
3. **Questions to which answers are desired by post, are so replied to solely at the Editor's discretion. If no answer is sent by post, the query will be replied to in the "Letter-Box" columns of HEALTH. A stamped addressed envelope must accompany all queries to which a private reply is desired.**
4. **Addresses of physicians and surgeons will, as heretofore, be forwarded FREE to Correspondents on their enclosing a stamped addressed envelope for reply.**
5. **Correspondents are requested to write on one side of the paper only, and to make their inquiries as brief as may be consistent with clearness.**
6. **From the necessity of sending HEALTH to press early in the week, no Correspondent can be replied to in the "Letter-Box" columns in the same week in which the inquiry is received. Replies crushed out of any issue will be found in the succeeding number.**
7. **No Post Cards must be used in sending queries. Violation of this rule deprives the sender of the privilege of a reply.**

QUERIES AND ANSWERS.

REPLIES: GENERAL, SANITARY, AND MEDICAL

[Readers of HEALTH will kindly note that when back numbers of the journal are desired, the letters containing such requests and stamps for the numbers should be addressed to the PUBLISHER of HEALTH, 2, Paternoster-square, London, E.C., and *not to the Editor*.]

GAMBA.—You will find the treatment fully described in advice given to "C. B. S." in the present number.

CLIO.—1. See advice given to "Borrodaile" in the present number. 2. Apply a little Vinolia as an ointment to the eyelids at night; and avoid chills and using the eyes much, by gaslight especially.

M. CARMEN.—Not one of the symptoms you name (save the constipation) is indicative of ill-health. On the contrary, what you do name are all signs of vigour, and why you should for a moment have regarded them as otherwise we are at a loss to conceive. Your state of life should surely suffice for the perfect

abolition of all the symptoms which appear to annoy you. For the constipation, follow the advice given to "Ailing" in the present number, and you will find that condition to disappear. Diet and exercise form the only true cure for constipation.

C. R. X.—Apply boracic acid ointment to the part on lint, and keep it thoroughly clean.

ELFIN.—Apply to the Medical Battery Co., 52, Oxford-street, W., and they will supply you with the information desired.

W. B. S.—Simply press out the blackheads; wash the parts (as a matter of common cleanliness) night and morning with Vinolia Soap, and apply a little Vinolia as an ointment after washing.

H. HEAP.—You might try Stern's Pumiline Essence used in an inhaler such as you describe. You can certainly teach the child to inhale and to bring the vapour down the nose. Kepler's Cod Oil and Malt Extract should be given after meals during the winter.

G. MOON.—Your chemist will supply you with Vereker's Chloride of Ammonium Inhaler. It is made by Burroughs & Wellcome, Snow-hill-buildings, London, E.C. All the essentials are supplied with the Inhaler.

T. A. BLANCHLAND.—Probably all your symptoms are due to your going so long without food. You should arrange to have a proper meal in the middle of the day; and you should take a glass of stout to dinner to assist your assimilation. After meals, you may take the tonic ordered to "George Ross" in the present number, and this will probably cure your ailment.

ANNA.—In a case like yours an examination will be a necessity for ascertaining the exact state of matters. All your symptoms indicate that the doctor's opinion is correct, and you should think of your health before any other consideration. Why not consult a lady-doctor? We can send you address of such in London, if you send stamped addressed envelope.

D. SCOTT.—You must make a radical change in your diet. We advise you to follow out the rules laid down in the pamphlet, "A Lecture to Young Men" (post free, for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and when you have overcome the constipation, &c., by the diet-rules it gives, you should try a course of the tonics prescribed therein. You will find a tepid sponge bath each morning do you good.

W. M. O.—Your digestion is at fault. See advice given to "G. Simpson" in HEALTH No. 350, and if not bettered write again. The Cascara will assist your cure materially, but diet must render permanent the effects of this drug. Avoid late suppers; and use Bunter's Puriline Tooth Paste night and morning for your teeth.

RICHMOND.—1. In past volumes of HEALTH you will find the Tobacco question treated in various articles. Tobacco, like everything else, has to be judged relatively to the person who uses it. For one it is hurtful; for another it is (in moderation) beneficial; in the case of a third, even in excess, it appears to do little or no harm. You must judge for yourself; there is no fixed rule either for alcohol or for tobacco. 2. We should say the lessons would be given as thoroughly as before. We have heard no complaints. 3. See advice given to "Agag" in HEALTH No. 350.

ALFRED DAY.—The use of arsenic is utterly unadvisable and dangerous, save under a doctor's direction.

SCOTTISH READER.—Take a teaspoonful of Inman's Syrup of the Hypophosphites in a wineglass of water, thrice daily, after your meals; and you must also have more open-air exercise. A tepid sponge bath each morning will also aid your cure. You should bear in mind that your cure rests largely with yourself. If you go on brooding over your fancied ailments, no treatment can be of any service to you.

ROMANCE.—We fail to see why the falling out of your eyebrow hairs should so perturb your mind. It is not at all uncommon for these hairs to fall out and to grow again. We advise you to rub into your eyebrows night and morning a little plain brilliantine, such as any chemist will supply you with. If that fails to relieve you, try the lotion ordered to "Sandy" in HEALTH No. 351.

GEORGE ROSS.—Take a teaspoonful of Inman's Syrup of the Hypophosphites in a wineglass of water, thrice daily, after your meals (see advertisement in our pages), and take more open-air exercise.

WILLIAM HAY.—We should say not. Cases are known in which such a condition has been no barrier to the step you name. You must judge, however, largely for yourself; but you would be wise to seek the advice of a surgeon beforehand, and explain all your feelings and symptoms to him; and also let him subject you to a thorough examination. This plan may save you much trouble and annoyance hereafter.

E. F. M.—1. Apply to Mr. Pulvermacher, 194, Regent-street, London, W., and obtain from him full particulars regarding his galvanic belts. 2. Stern's Pumiline preparations will suit you. Use the Extract and the Liniment.

A. SCHOFIELD.—The following is a lotion to be used for the cure of freckles: Chloride of ammonium, one drachm; hydrochloric acid, a drachm and a half; glycerine, one ounce; virginal, one ounce and a half. Mix. Apply to the freckles morning and evening with a camel's-hair brush.

MAYPOLE.—To cure scurf or dandruff the following may be tried: Chloral hydrate, six drachms; water, sixteen ounces. Mix. Rub well into the scalp every second or third day. The hair is to be dried, and then dressed with a little bay rum and glycerine, or other wash.

L. S. S.—Take the following pill: Extract of aloes, eighteen grains; sulphate of quinine, twelve grains; pil. hydrargyri, six grains; extract of rhubarb, eighteen grains. Mix, and make into twelve pills; one to be taken daily about midday.

G. A. H.—Try the effect of rubbing a menthol cone (such as is used for the cure of neuralgia, and sold by all druggists) on the affected parts at intervals.

SELBY.—Bathe the face morning and night with light white wine—Hungarian will do; or use the following lotion: Sulphate of zinc, two grains; compound tincture of lavender, eight minims; distilled water, one ounce. Apply two or three times daily.

AILING.—Take a vegetable dietary—stewed fruits, apples or oranges, &c., and whole-meal bread, with Scott's Midlothian Oat Flour for supper and breakfast; avoid tea and coffee; take Cascara Cordial, twenty drops in water, or a Tabloid, between meals, once or twice daily. Sponge with cold water each morning; sleep on a hard mattress; take plenty of open-air exercise, and avoid fluids and suppers late at night.

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ESSENCE.—Try the following, and see to the clothing:—Ammonio-citrate of iron, a drachm and a half; spirit of sal-volatile, three drachms; chloric ether, one drachm; syrup of tolu, three drachms; camphor julep, seven ounces. Lable: "Two tablespoonfuls thrice daily, after meals."

BORRODAILE.—Use for your hair the following lotion: Carbolic acid, half a drachm; tincture of nux vomica, two drachms; tincture of cantharides, B.P., two drachms; tincture of cinchona, one ounce; eau de Cologne and cocoa-nut oil, of each a sufficiency to make up four ounces. Mix. To be well rubbed into the roots of the hair with a soft sponge once or twice a day.

BIS.—To unite iron with cod oil, the following is a method:—Syrup of the iodide of iron, three drachms; mucilage of acacia, one ounce; cod liver oil, to make up six ounces. Mix. A dessertspoonful may be given after food, twice or thrice daily.

SOUTH.—Read the pamphlet, "A Lecture to Young Men" (post free, for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and study what is therein said about cases like yours.

E. OKEDEN.—What you name is due to a cold in the head. Use Burroughs & Wellcome's Chloride of Ammonium Inhaler; and take a teaspoonful of Inman's Syrup of the Hypophosphites in a wineglass of water, thrice daily, after your meals.

A. M.—Apply Vinolia (Roberts & Co., 76, New Bond-street, London, W.) to the eruptions regularly for a time, and wash with Vinolia Soap only.

C. B. S.—To cure a case of small worms, look to your food; avoid all uncooked vegetables and fruits; exercise the utmost cleanliness of person, and use an injection of infusion of quassia, or one made by adding half an ounce tincture of the perchloride of iron to a pint of water. Salt should be regularly taken with your meals.

E. BELL.—The following is a suitable cough mixture: Chlorodyne, one drachm; ipecacuanha wine, one drachm; syrup of squills, one drachm; glycerine, to make up two ounces. Label: "A teaspoonful in a little water at intervals."

R. SALMON.—Try a hot hip-bath at bedtime. The use of Stern's Pumiline Liniment is also to be recommended. Rub over the seat of pain a little chloroform liniment, morning and night. The simple plan of applying a hot flannel cloth wrung out of hot water and sprinkled with turpentine is also useful.

FORTUNA.—For piles, use Bayley's Cure, 17, Cockspur-street, Pall-mall, London, S.W., and regulate your diet according to the advice given to "Ailing" in the present number.

BALD ONE.—For your hair-weakness, use the following lotion: Solution of ammonia, half an ounce; tincture of cantharides, half an ounce; eau de Cologne, one ounce; water, to eight ounces. Rub into the roots night and morning with a soft sponge.

ANTWERP.—Read the pamphlet entitled "A Lecture to Young Men" (5th Edition, post free, for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and follow out the instructions therein given regarding diet, habits, &c.

BAKER.—Try the effect of taking a pill composed of two grains sulphate of quinine an hour before dinner daily. Apply Tidman's Sea Salt, heated, dry, in a flannel bag or stocking to the shoulders when the pain is severe, and bathe the parts each morning in a strong solution of salt and tepid water.

E. F.—Sit and rest with your feet slightly raised, and sleep with your feet on a pillow, so as to favour the return of the blood in the veins. You must also have your legs bandaged. Messrs Lindsay & Co., bandage-makers, Ludgate-hill, E.C., will instruct you in the application of a Martin's Bandage, to be worn regularly for a time.

A GIRL.—Superfluous hairs can only be satisfactorily (and painlessly) removed by electricity. Send 4½d. in stamps to the Publisher of HEALTH, and obtain a copy of No. 149 of this journal, and read the article therein given on this method of removing hairs. We can send you address of a specialist on receipt of stamped addressed envelope.

R. MAPLE.—The following iron and quinine mixture may do good in the case you name: Sulphate of quinine, eight grains; sulphate of iron, sixteen grains; dilute sulphuric acid, eight minims; water, to eight ounces. A tablespoonful thrice daily.

STAR.—Order some Dee Oil from your chemist, and apply it to the child's head night and morning. Wash the head with Vinolia Soap before applying the oil.

RAISON.—Take twenty drops of Cascara Cordial in water an hour before breakfast, as a cure for constipation, and follow up the cure by care in diet. Avoid tea and coffee, and take whole-meal bread, Scott's Midlothian Oat Flour, for breakfast and supper; eat little butcher-meat, but take white boiled fish, stewed fruits, and cornflour. Take moderate exercise, and try a cold or tepid bath each morning.

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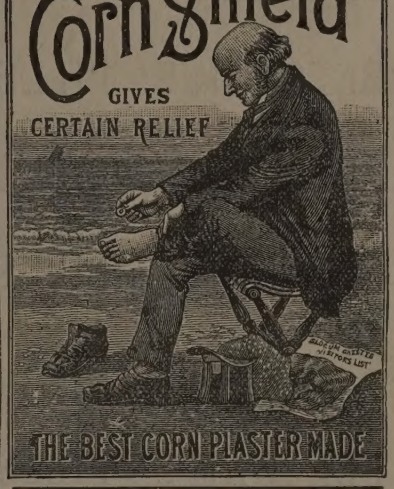

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